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Uighurs are an ancient civilization in the world; indestructible even under inhuman pressures



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## Additional notes on the Heterocera fauna of Turkey (Lepidoptera)

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**Abstract:** Additional notes on the Heterocera fauna of Turkey (Lepidoptera). *Misc. Pap.* 178: 1-12, 1 tab., 8 figs.

This paper deals with complementary notes on the Heterocera fauna of Turkey. Totally 37 new provincial records are given.

**Key words:** *Cosmopterygidae*, *Ctenuchidae*, *Ethmiidae*, *Geometridae*, *Lasiocampidae*, *Noctuidae*, *Notodontidae*, *Oecophoridae*, *Psychidae*, *Pyralidae*, *Tortricidae*, *Zygaenidae*, fauna Turkey.

Recently, some species of the Heterocera of Turkey have been reported by the authors faunistically (Kemal & Koçak, 2018b). The present paper contains some complementary notes on the Heterocera fauna of Turkey. Materials were collected by the authors in the past from various provinces of Turkey. The faunistic list of the 76 species of 12 families given below comprises new or little known species. The number of the new provincial records of the species are mentioned in Table 1.

All the species are identified by the authors. The images used in this paper are preserved in the Cesa archive, and the material in the Collection of the Cesa.

The symbol, \* denotes that the mtCOI DNA of the species should be examined separately.

**Table 1** - Faunistic evaluations of the Heterocera species. Number of the species as new records are given in the related provincial columns. At the bottom, total number of the Lepidoptera species of the related provinces are given. These updated information are based upon the Info-systems of the Cesa.<sup>2</sup>

	Ankara Pr. (06)	Bitlis Pr (13)	Diyarbakır Pr. (21)	İçel Pr. (33)	Kars Pr (36)	Malatya Pr. (44)	Siirt Pr. (56)	Iğdır Pr. (76)	Düzce Pr. (81)
New records	01	01	02	02	01	01	02	26	01
Total numbers	1519	1098	440	1076	779	653	787	690	168

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<sup>2</sup> <http://www.cesa-tr.org/Infos.htm>

## List of the species

### *Cosmopterygidae*

#### **\**Tolliella fulguritella* (Ragonot,1895)**

Material studied: 1♂. E Turkey, Diyarbakır Pr., Kulp, Taşköprü 850m (21Nb), 20.vii.2008, M.Aydın leg.

Remarks: This record is new for the fauna of Diyarbakır Province (Kemal & Koçak, 2018b).

### *Ctenuchidae*

#### **\**Amata sintenisi sintenisi* (Standfuss,1892)**

Material studied: 28♂. SE Turkey, Şırnak Pr. Beytüşşebap, Komato 1100m (73Ak), 4.v.2013, M. Kemal & A.Koçak leg.

Remarks: Nominate subspecies is confined to SE Turkey.

#### **\**Amata transcaspica jasoni* Ignatyev & Zolotuhin,2005**

Material studied: 3♂2♀. E Turkey, Malatya Pr., Akçadağ, Gürkaynak 1540m (44Ab), 8.vi.2013, Quercetum openings, M.Kemal & A.Koçak leg.

Remarks: This subspecies was described from Malatya Pr. (Doğanşehir). In order to understand better the relationship among the Turkish *Amata* species, DNA studies on this group have been planned.

### *Ethmiidae*

#### ***Ethmia bipunctella* (Fabricius,1775)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

#### **\**Ethmia dodecea* (Haworth,[1828])**

Material studied: 19♂♀. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: Previously, this species was known from Amasya and Bolu Provinces (NW Turkey). New record for the fauna of Iğdır Province (Koçak & Kemal,2018).

### *Geometridae*

#### ***Cataclysmes rigata* (Hübner,[1813])**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

#### ***Chiasmia clathrata* (Linnaeus,1758)**

(Figs. 1-3)

Material studied: 1♀ (GP2314). NW Turkey, Kars Pr., Kağızman, Akçay 1200m (36Db), M.Kemal & A.Koçak leg. 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New records for the fauna of Kars and Iğdır Provinces.

#### ***Docirava mundata* (Staudinger,1892)**

Material studied: 1♂. S Turkey, Içel Pr., Gülek, Elmalı boğazı 1400m, 8.ix.1980, A.Koçak leg.

Remarks: New record for the fauna of Içel Province.

***Docirava musculata* (Staudinger,1892) (Fig. 4)**

Material studied: 1♂ (GP432, A.Koçak,1976). C Turkey, Ankara Pr., Altındağ, Çubuk Barajı-I, 950m (06Aa), 7.v.1969, A.Koçak leg.

Remarks: New record for the fauna of Ankara Province.

***Ellicrinia cordiaria* (Hübner,1790)**

Material studied: 4♂♀. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Ellicrinia trinotata* (Metzner,1845)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Kentormanı 960m (76Bb), 9.v.2012, nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Gnophos gorgatus* Brandt,1938**

Material studied: 1♂. SE Turkey, Hakkari Pr. Yüksekova, Yeşiltaş 1350m (30Dx), 21.vii.2003, M. Kemal & A.Koçak leg.

***Gnophos pseudosnelleni* Rjabov,1964**

Material studied: 4♀. SE Turkey, Hakkari Pr. Yüksekova, Yeşiltaş 1350m (30Dx), 21.vii.2003, M. Kemal & A.Koçak leg.

***Idaea degeneraria* (Hübner,[1799])**

Material studied: 4♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Isturgia arenacearia* ([Denis & Schiffermüller],1775)**

Material studied: 6♂♀. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Lythria purpuraria* (Linnaeus,1758)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007. 1♀. Same province, Ağrı Dağı, 8.viii.2007, diurnal, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Narraga tessularia* (Metzner,1845)**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Neugnopharmia cataleucaria* (Staudinger,1901)**

Material studied: 1♂4♀. SE Turkey, Hakkari Pr. Yüksekova, Yeşiltaş 1350m (30Dx), 21.vii.2003, M. Kemal & A.Koçak leg.

***\*Ochodontia adustaria* Fischer de Waldheim,1840**

Material studied: 4♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for Tuzluca district.

***Phigalia pedaria* (Fabricius,1787)**

(= *pilosaria* [Denis & Schiffermüller],1775, nomen nudum)

Material studied: 1♂. E Turkey, Bitlis Pr. Akpınar 1185m (13Ce), 3.iii.2011. 1♂ (dark form). Siirt Pr. Şirvan W (56Ft), 5.iii.2011, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Bitlis Province.

***Scopula beckeraria* (Lederer, 1853)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for Tuzluca district.

**\**Scopula humifusaria* (Eversmann, 1837)**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Scopula marginepunctata* (Goeze, 1781)**

Material studied: 5♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Scopula orientalis* (Alpheraky, 1876)**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Synopsia sociaria* (Hübner, [1799])**

Material studied: 3♂1♀. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

**\**Timandra comae* Schmidt, 1931**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Lasiocampidae******Malacosoma castrensis* (Linnaeus, 1758)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Noctuidae******Acantholipes regularis* (Hübner, [1813])**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Acontia (Emmelia) trabealis* (Scopoli, 1763)**

Material studied: 6♂♀. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for Tuzluca district.

**\**Drasteria rada* (Boisduval, 1848)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

**\**Drasteria saisani* (Staudinger,1882)**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Eublemma (albida-gr.) gratissimum* (Staudinger,1892)**

Material studied: 5♂♀. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Lacanobia oleracea* (Linnaeus,1758)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Mythimna vitellina* (Hübner,[1808])**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

**\**Pericyma albidentaria* (Freyer,[1841])**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for Tuzluca district.

***Thysanoplusia daubei* (Boisduval,1840)**

Material studied: 1♂. S Turkey, İçel Pr. Anamur, Ovabaşı 2km W 100m (33Am), 3.v.2018, M. Kemal & A.Koçak leg.

Remarks: Previously this species was known from Tarsus (Yazlık) (İçel Pr.).<sup>3</sup>

***Tyta luctuosa* ([Denis & Schiffermüller],1775)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

**\**Valeria kartalea* Kuhna & Schmitz,1997**

Material studied: 1♂. SE Turkey, Siirt Pr. Şirvan, Gülenakabe 850m (56Fğ), 4.iii.2011, M.Kemal & A.Koçak leg.

Remarks: This species was described from Gaziantep Pr. (Yamaçoba) (S Turkey), and known also from Van Pr. (Çatak, Amata valley).

***Zekelita (Ravalita) ravalis* (Herrich-Schäffer,[1852])**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Notodontidae******Phalera bucephaloides syriaca* Zerny,1933**

Material studied: 2♂2♀. SE Turkey, Hakkari Pr. Yüksekova, Yeşiltaş 1350m (30Dx), 21.vii.2003, M. Kemal & A.Koçak leg.

***Rhegmaphila alpina osmana* Friedel,1967**

Material studied: 1♂. NW Turkey, Düzce Pr., Düzce 150m (81C), 20. vi.1999, nocturnal, M. Kemal & A.Koçak leg.

Remarks: The subspecies was described by Friedel from Ankara Pr. (Kızılcahamam), and found especially western provinces of Turkey. The nominate subspecies occurs in France and Spain. The present record of the species is new for the fauna of Düzce Province.

<sup>3</sup> Baisch et al., 1998, Esperiana 6: 356.

**Oecophoridae*****Anchinia cristalis mukusalis* Kemal & Koçak, 2017**

Material studied: 1♂. SE Turkey, Hakkari Pr. Zap valley, Kırıkdağ 1580m (30Bc1), 4.vii.2011, M.Kemal & A.Koçak leg.

Remarks: This subspecies was described by the authors from Bahçesaray (Van Pr.) (Koçak & Kemal, 2017b). Recently, this species was listed by the authors from Zap Valley (Hakkari Pr.) (Kemal & Koçak, 2018a: 185). The present record supports the occurrence of the species in the valley, which was collected six years ago before the description of the subspecies. It may be attributed to the subspecies *mukusensis*.

**Psychidae****\**Typhonia* sp.**

Material studied: 1♂. E Turkey, Van Pr., Gevaş, Artos Mt. 2065m. (65Fp), diurnal, 11.viii.2012. 1♀, from same place, 14.viii.2012, M.Kemal & A.Koçak leg.

Remarks: Specific identity is not easy, based upon the external and genitalic morphology (Arnscheid & Weidlich, 2017). Investigation on this species is ongoing.

**Pyralidae*****Acrobasis advenella* (Zincken, 1818)**

Material studied: 3♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Achyra nudalis* (Hübner, 1796)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007. 1♂. Same province, Aralık, DÜÇ 830m, 14 v 2012, M.Kemal & A.Koçak leg.

Remarks: New record for Tuzluca district.

**\**Aeglotis argentalis* (Christoph, 1887)**

Material studied: 1♂. SE Turkey, Hakkari Pr., Yüksekova, Yeşiltaş 1500m (30Dx), 21.vii.2003, M. Kemal & A.Koçak leg.

Remarks: In Turkey, this species is known only from Hakkari and Van Provinces (Kemal & Koçak, 2017a). It was also reported by the authors from northern Pakistan (Swat, Karakar and Malakhazar SE Saidu Sharif) (Koçak & Kemal, 2014).

***Aporodes floralis* (Hübner, [1809])**

Material studied: 4♂♀. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Bradyrrhoa gilveolella* (Treitschke, 1833)**

Material studied: 1♀. SE Hakkari Pr., Yüksekova, Yeşiltaş 1350m (30Dx), 21.vii.2003, M.Kemal & A.Koçak leg.

Remarks: This record is new for Yüksekova district.

***Cynaeda gigantea* (Staudinger, 1879)**

(= *#gigantea* Wocke, 1871, nomen nudum)

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for Tuzluca district.

***Ecpyrrhorhoe diffusalis* (Guenée, 1854)**

Material studied: 4♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Euchromius pulverosus* (Christoph, 1887)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Euzophera lunulella trigeminata* W.Warren & Rothschild, 1905**

Material studied: 1♂. E Turkey, Malatya Pr. Darende, Karaoğuz 1100m (44Ee), 16.vii.2004, nocturnal, M. Kemal & A.Koçak leg.

Remarks: New record for the fauna of Malatya Province.

***Euzopherodes lutisignella liturosella* (Erschoff, 1874)**

Material studied: 1♂. SE Turkey, Siirt Pr., Şirvan, Ormanbağı 1100m (56Fg), 25.iv.2008, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Siirt Province.

***Evergestis forficalis* (Linnaeus, 1758)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Herpetogramma licarsisalis* (Walker, 1859)**

Material studied: 1♀. SE Turkey, Siirt Pr., Şirvan, Tomdere 640m (56Fö), 30.x.2010, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Siirt Province.

***Keradere lepidella* (Ragonot, 1887)**

Material studied: 1♂. SE Turkey, Hakkari Pr. Hakkari city 1700m (30Ba), 2.vii.1972, A.Koçak leg. 1♂. C Turkey, Karaman Pr. Ayrancı 1000m (70Aa), 2.vii.1980, A.Koçak leg. 1♂. C Turkey, Ankara Pr. Çal Dağı 1200m (06Kb), 10. vi.1981, A.Koçak leg. 1♂. E Turkey, Van Pr., Çatak, 3km NNE 1500m (65Dh), 25.v.2004, M.Doğruöz leg.

Remarks: The etymology of *Keradere* was discussed by the authors (Kemal & Koçak, 2018c:215).

***Metasia supbandalis* (Hübner, [1823])**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Myelois ossicolor* Ragonot, 1893**

Material studied: 2♂. SE Turkey, Diyarbakır Pr. Kulp, Taşköprü 800m (21Nb), 22 vii 2008, M. Aydın leg. 1♀. N. Iran, Elburs Mts. Lashgarak 1750m (Lgr), 5 vii 1994, A.Koçak, S.Seven & Y.Housseinpour leg.

Remarks: New record for the fauna of Diyarbakır Province.

***Nomophila noctuella* ([Denis & Schiffermüller], 1775)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for Tuzluca district.

***Nyctegretis lineana* (Scopoli, 1786)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Oncocera semirubella* (Scopoli,1763)**

Material studied: 3♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Pyralis perversalis* (Herrich-Schäffer,[1849])**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

***Pyrasia gutturalis* (Staudinger,1879)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Pyrausta purpuralis* (Linnaeus,1758)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Pyrausta sanguinalis* (Linnaeus,1767)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Sciota rhenella* (Zincken,1818)**

Material studied: 9♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Sitochroa straminealis* (Hampson,1900)**

Material studied: 1♀. SE Turkey, Hakkari Pr. Yüksekova, Yeşiltaş 1350m (30Dx) 21.vii.2003, M.Kemal & A.Koçak leg.

***Sitochroa verticalis albalis* Kemal & Koçak,2017**

The subspecies *albalis* was described by the authors from Bahçesaray (Krapet Pass 2800m) (Kemal & Koçak, 2017b). Subsequent faunistic investigations prove that this subspecies is confined to Van and Hakkari Province (SE Turkey) with the constant diagnostic characters. DNA researches support also its subspecific identity (Kemal, Kızıldağ & Koçak,2018).

Material studied: 1♀. E Turkey, Van Pr., Çatak, Amata valley 1600m (65Dlc), 13.vi.2002; 1♂, SE Turkey, Hakkari Pr., Kırıkdağ 1580m (30Bc1), 4.vii.2011, M.Kemal & A.Koçak leg.

**\**Sitochroa verticalis verticalis* (Linnaeus,1758)**

Material studied: 3♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for Tuzluca district.

**\**Tegostoma comparalis* (Hübner,1796)**

Material studied: 2♂1♀. NW Turkey, Iğdır Pr., Aralık, DÜÇ 830m, 14.v.2012, M.Kemal & A.Koçak leg.

***Udea ferrugalis* (Hübner,1796)**

Material studied: 2♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.



**Tortricidae*****Cydia pumonella* (Linnaeus, 1758)**

Material studied: 1♂. NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: New record for the fauna of Iğdır Province.

***Eugnosta lathoniana* (Hübner, [1800])**

Material studied: 2♂. NW Turkey, İstanbul Pr. Pendik, Kaynarca (34H), 10.viii.1968, A.Koçak leg. 1♂. C Turkey, Konya Pr., Hadim 1550m (42K), 2.vii.1976, A.Koçak leg. 1♂. C Turkey, Niğde Pr. Aladağlar, Demirkazık 1660m (51Ba), 10.viii.1980, A.Koçak leg.

***Phtheochroa duponchelana* (Duponchel, 1843)**

Material studied: 3♂. S Turkey, Adana Pr. Pozantı 900m, 9.v.1981, A.Koçak leg. 1♂. C Turkey, Niğde Pr., Horoz, 5.vi.1981, A.Koçak leg. 2♂. S Turkey, Antalya Pr. Cevizli, 21.v.1983, A.Koçak leg.

***Phtheochroa palpana* (Ragonot, 1894)**

Material studied: 1♂. S Turkey, Antalya Pr. Cevizli, 21.v.1983, A.Koçak leg. 1♂. İçel Pr. Anamur, Çiçekyurdu 1620m (33Ac), 4.v.2018, diurnal, M.Kemal & A.Koçak leg.

Remarks: This vernal species is new for the fauna of İçel Province.

**Zygaenidae****\**Jordanita chloros* (Hübner, [1813])****(Figs. 5, 6)**

Material studied: 1♂ (GP2744♂). NW Turkey, Iğdır Pr., Tuzluca, Gaziler 1075m (76Da), nocturnal, 8.viii.2007, M.Kemal & A.Koçak leg.

Remarks: The identity of this species is based upon the male genitalia. The colouration of the forewing and the thoracal area was invisible in our specimen. On the other hand, the length of process of valva rather long (more than typical *graeca*). However, *graeca* and *chloros* may not be always easily distinguished from each other externally. Therefore, Mt DNA investigation on the populations of East Turkey seems to be necessary.

***Jordanita (Roccia) volgensis* (Möschler, 1862)****(Figs. 7, 8)**

Material studied: 2♂ (GP3043♂), NW Turkey, Iğdır Prov., Hama Mt. 1680m (76Bf), 27.v.2012, M.Kemal & A.Koçak leg.

Remarks: Specific identity is based on the description and genitalic illustrations by Efetov & Tarmann (1999).

New record for the fauna of Iğdır Province.

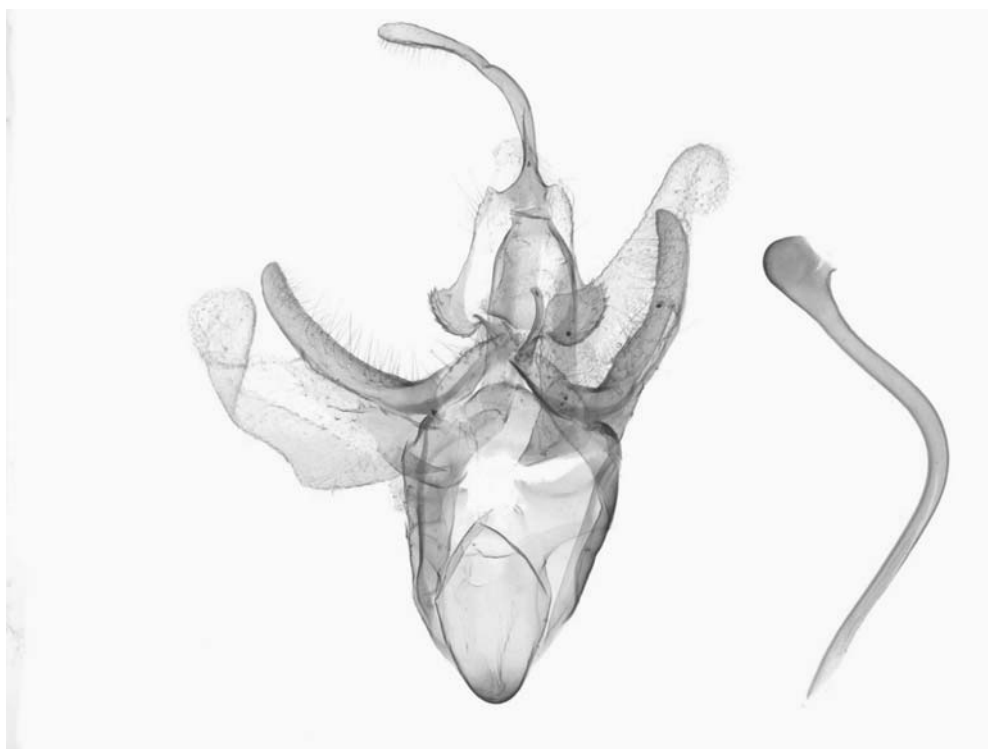
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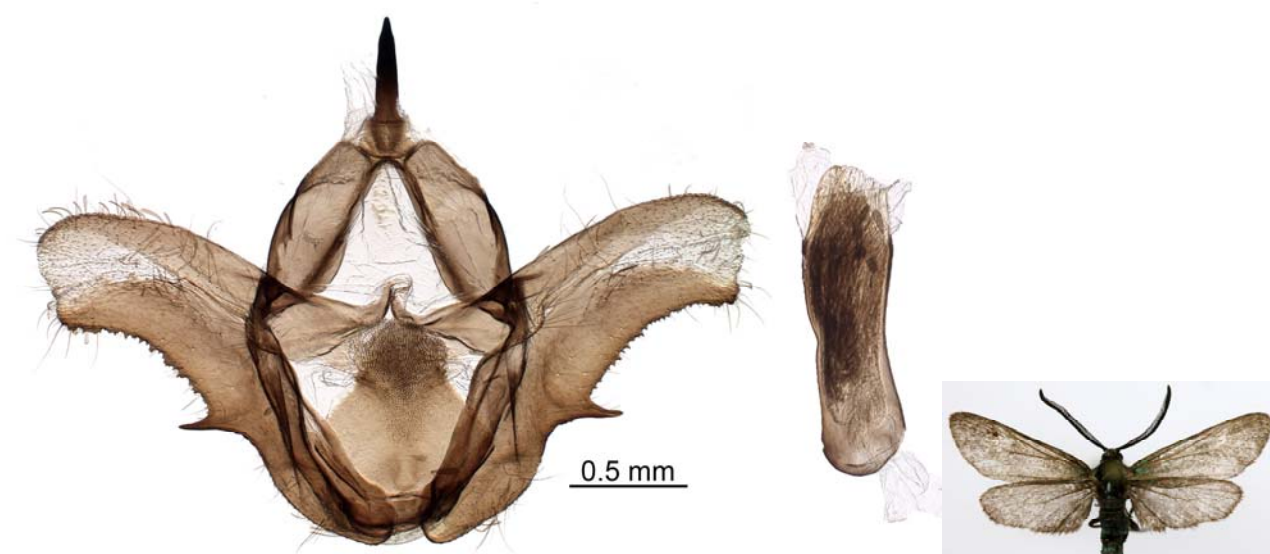
## Images



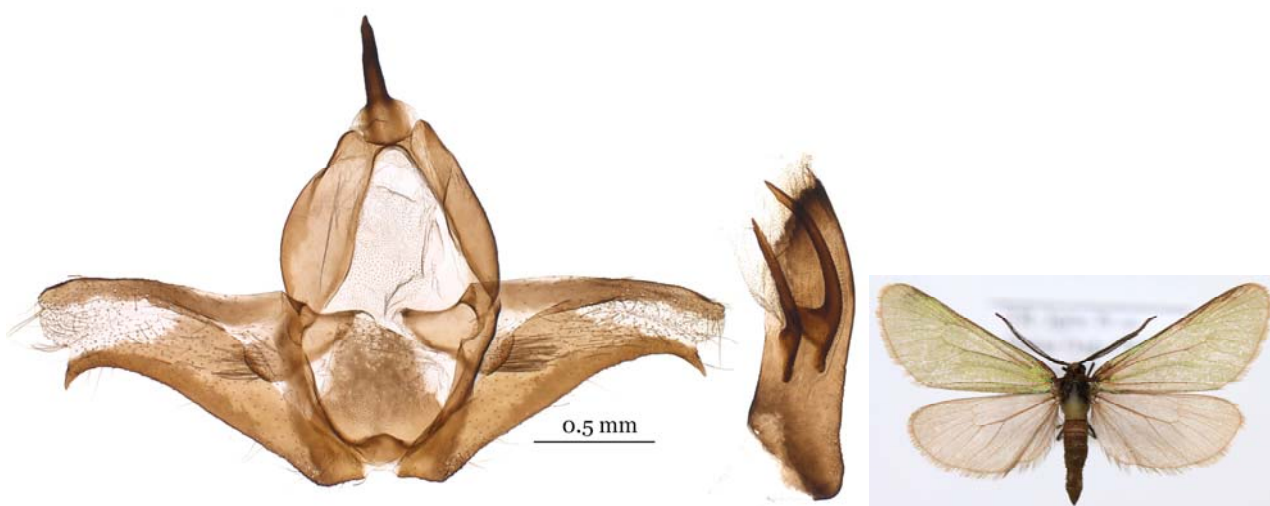
**Figs. 1-3** - *Chiasmia clathrata* (Geometridae). Tympanal organ of the female (before & after preparation), and female genitalia with enlarged signum, GP2314. NW Turkey, Kars Pr., Kağızman, Akçay, M. Kemal (Cesa)



**Fig. 4** – *Docirava musculata* (Geometridae). Male genitalia GP432. Ankara Pr., Altındağ, Çubuk Barajı-I, A.Koçak, 1976 (Cesa).



**Figs. 5, 6** – *Jordanita chloros* (Zygaenidae). Male genitalia, GP2744, and upperside of male. NW Turkey, Iğdır Pr. Tuzluca, Gaziler, M. Kemal (Cesa)



**Figs. 7, 8** – *Jordanita volgensis* (Zygaenidae). Male genitalia, GP3043, and upperside of male. NW Turkey, Iğdır Pr. Hama Mt., M. Kemal (Cesa)

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